

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A method for forming a photoresist pattern comprising:

(a) coating an etching mask layer on an underlying layer;

(b) coating a photoresist composition including silicon on the etching mask layer to form a photoresist film, the photoresist film generating silicon gas upon exposure to light in part (d) below;

(c) ~~coating forming~~ a gas protection film comprising a water-soluble polymer material on the photoresist film, the gas protection film absorbing silicon gas generated from the photoresist film during an exposure process;

(d) performing a photolithography process on the resulting structure to form a photoresist film pattern;

(e) etching the etching mask layer of part (b) step (a) using the photoresist film pattern as an etching mask to form an etching mask pattern; and

(f) forming an underlying layer pattern by an etching process using the etching mask pattern.

2. (Currently Amended) The method according to claim 1, wherein comprising forming the etching mask layer of part (a) is formed by coating an i-line photoresist or KrF photoresist.

3. (Canceled)

4. (Currently Amended) The method according to claim [3] 1, wherein the photoresist composition is suitable for a photolithographic process employing a light source selected from the group consisting of ArF (193nm), VUV (157nm) and EUV (13nm).

5. (Canceled)

6. (Previously Presented) The method according to claim 1, wherein the water-soluble polymer is selected from the group consisting of poly(methyl

methacrylate/acrylic acid), poly(methyl acrylate/acrylic acid), poly(dimethyl acrylate/methyl acrylate), poly(dimethyl acrylate/methyl methacrylate), poly(vinyl pyrrolidone), poly(dimethyl acrylate) and mixtures thereof.

7. (Previously Presented) The method according to claim 1, wherein the light is ArF (193nm), VUV (157nm) or EUV (13nm).

8. (Previously Presented) The method according to claim 1, wherein part (c) further comprises:

(c-1) spin coating a gas protection composition on the resultant surface of (b); and

(c-2) baking the coated gas protection composition.

9. (Currently Amended) A method for forming a photoresist pattern comprising:

(a) coating an etching mask layer on an underlying layer;

(b) coating a photoresist composition including silicon compound on the etching mask layer to form a photoresist film;

(c) ~~coating forming~~ a gas protection composition film on the photoresist film, the gas protection film comprising a water-soluble polymer selected from the group consisting of poly(methyl methacrylate/acrylic acid), poly(methyl acrylate/acrylic acid), poly(dimethyl acrylate/methyl acrylate), poly(dimethyl acrylate/methyl methacrylate), poly(vinyl pyrrolidone) and poly(dimethyl acrylate) ~~on the photoresist film;~~

(d) performing a photolithography process on the resulting structure to form a photoresist film pattern;

(e) etching the etching mask layer of step (b) ~~(a)~~ using the photoresist film pattern as an etching mask to form an etching mask pattern; and

(f) forming an underlying layer pattern by an etching process using the etching mask pattern.

10. (Canceled)

11. (New) The method according to claim 9, comprising forming the etching mask layer of part (a) by coating an i-line photoresist or KrF photoresist.

12. (New) The method according to claim 9, wherein the photoresist composition is suitable for a photolithographic process employing a light source selected from the group consisting of ArF (193nm), VUV (157nm) and EUV (13nm).

13. (New) The method according to claim 9, wherein part (c) further comprises:

- (c-1) spin coating a gas protection composition on the resultant surface of (b); and
- (c-2) baking the coated gas protection composition.